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HW#4: Interpreting Graphs

Geometry

Due: Friday, September 11th 2015

1) You have $50 in your bank account and you deposit $20 per week. Write an equation for the total amount of money you have in your account after *x* weeks. Annotate the equation- label the average rate of change, the y-intercept and explain hat the units for average rate of change are.

Label the graph below with an appropriate scale and graph the equation.

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a) How much money will you have in your account after 52 weeks if you do not make any withdrawals?

b) How long would it take for you to have $790 in your account?

c) If your friend has 100 dollars in his bank account and spends 10 dollars every week. Write an equation to model your friend’s bank account after x weeks.

d) Graph your friend’s bank account with a dotted line and compare the two average rates of change. What conclusions can you draw?

2) So far you have climbed 500 feet and you continue to climb at a rate of 100 feet per hour. Write an equation to show how high you will have climbed after *x* hours. Graph the equation below, use the appropriate scale and label the axes.

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a) How high will you have climbed after 4 hours?

b) If the mountain is 1200 feet tall, how long will it take you to climb to the top?